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REMARKS

After the foregoing amendment, claims 13-25 are active in the present application. Claims 1-12 were previously cancelled, and claim 13 had been amended. No new matter has been added by the amendment and the amendment is believed to place the application in condition for allowance. Accordingly, reconsideration and allowance of the application, as amended, are respectfully requested.

Claims 13, 16 and 17 were rejected as anticipated by U.S. Patent No. 6,492,699 (Glenn). The Office Action equates the window supports 108 (See e.g., Glenn FIG. 10) with the stud bumps 34 of the present invention. Applicants respectfully traverse the rejection.

Glenn discloses an image sensor device in which a window 110 is disposed over an active area 104 of an image sensor 102. The window 110 is attached directly to the image sensor 102 with window supports 108. The window supports 108 are formed of either a transparent or opaque epoxy material. See Glenn, col. 6, lines 3-17.

In contrast, the stud bumps 34 of the present invention are formed of the same material as the bond wires 32 and are formed on the IC 22 in the same manner that the wirebonding is performed. That is, a ball bonding process is used to form the stud bumps. See Specification, paragraph [0035]. Further, the stud bumps 34 are provided as a stand-off, as opposed to an attachment means.

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Claim 13 has been amended to recite that the stud bumps are formed of the same material as the wires. This amendment is supported in the specification at paragraph [0035]. Thus, applicants respectfully submit that claim 13, as amended, is not anticipated by Glenn and that the rejection under 35 U.S.C. §102 be withdrawn.

Claims 14-15 were rejected as unpatentable over Glenn in view of U.S. Patent No. 6,661,083 (Lee). Lee is cited for disclosing a package and leadframe with gold wires. The Office Action states that it would have been obvious to use gold wires to benefit from the excellent conductivity associated with gold, and to make the stud bumps from gold as well because of the ready availability of the material. Applicants respectfully traverse the rejection.

The stud bumps 34 of the present invention, as discussed above, are stand-offs for the transparent cover, with the cover resting on the stud bumps. The stud bumps need not be conductive, nor must they provide attachment means like the epoxy disclosed by Glenn. Although Glenn used electrically conductive bond wires, Glenn does not teach or suggest that either the bond wire material or the wire bonding process can be used to form window supports. Thus, there is no suggestion to combine the gold metal wire material of Lee for use as the window support material of the present invention. Accordingly, Applicants submit that claims 14-15 (or 13) are nonobvious and respectfully request that the rejection under 35 U.S.C. §103 be withdrawn.

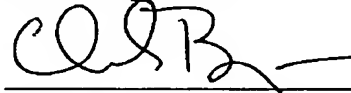
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Applicants note with appreciation that claims 22-25 have been allowed and that claims 18-21 were indicated as allowable if rewritten to include all of the limitations of the base claims and any intervening claims. However, in view of the remarks above, Applicants submit that claims 18-21 are already in condition for allowance.

In view of the foregoing amendment and remarks, it is respectfully submitted that the present application, including claims 13-25, is in condition for allowance, and such action is respectfully requested.

Respectfully submitted,

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